

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P997659

Luminaire Tested: SA2XXDP-B865DB2750-4F0-XX-W2A-A_3500K

Issue Date: 5/2/2025

Test Information

Test Method: LM-79-2019
Report Number: P997659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-19)
Test Lab: INNOVATION CENTER
Issue Date: 5/2/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: SA2XXDP-B865DB2750-4F0-XX-W2A-A_3500K
Description: Define 2 Direct Recessed with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

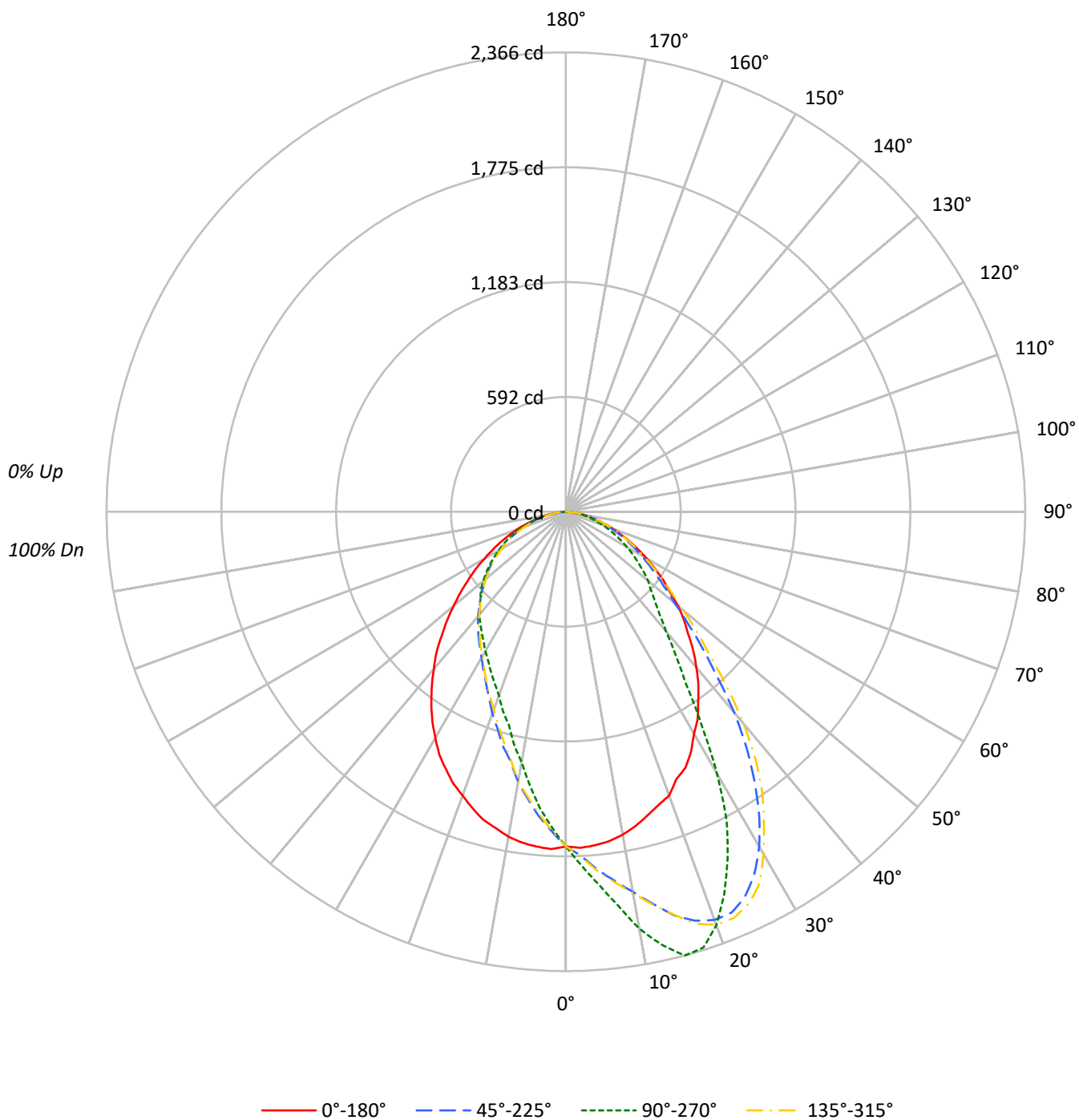
Lumens per Lamp: N/A
Luminaire Lumens: 3802.0 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.09 / 1.23
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20			
RC	80				70				50				30				10			0
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79		85	81	78		82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74	69	66	64
4	86	75	66	60	83	73	66	60	71	64	59		69	63	58		66	62	58	55
5	79	67	59	53	77	66	58	52	64	57	52		62	56	51		60	55	51	49
6	74	61	53	47	72	60	52	46	58	51	46		57	51	46		55	50	45	43
7	69	56	48	42	67	55	47	42	54	46	41		52	46	41		51	45	41	39
8	64	51	43	38	63	51	43	38	49	42	37		48	42	37		47	41	37	35
9	60	47	39	34	59	47	39	34	46	39	34		45	38	34		44	38	34	32
10	56	44	36	31	55	43	36	31	42	36	31		41	35	31		41	35	31	29

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°	270°
0°	27277	27277	27277	27277
5°	27403	30581	27508	24330
10°	27145	35043	27315	21056
15°	26546	38768	26915	18602
20°	26194	38176	26194	16958
25°	25425	34423	25540	15916
30°	24114	28446	24573	15156
35°	22959	20733	23343	14615
40°	21622	16560	21868	14314
45°	19955	14470	20282	13906
50°	18526	13601	18561	13635
55°	16887	12538	16997	13269
60°	15139	11489	15348	12705
65°	13593	10469	13843	12154
70°	12075	9502	12385	11339
75°	10367	8428	10776	10042
80°	8450	7247	9052	8086
85°	6248	6502	6738	4813

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 155°

Vertical Angle: 45°

Luminance: 35612 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.1	4.3
10°-20°	477.7	12.6
20°-30°	693.3	18.2
30°-40°	730.9	19.2
40°-50°	646.8	17.0
50°-60°	516.4	13.6
60°-70°	350.8	9.2
70°-80°	179.5	4.7
80°-90°	42.4	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1335.2	35.1
0°-40°	2066.1	54.3
0°-60°	3229.3	84.9
0°-90°	3802.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3802.0	100.0

CANDELA DISTRIBUTION:

	0°	90°	180°	270°	360°	Flux
0°	1723	1723	1723	1723	1723	
5°	1725	1925	1731	1531	1725	163
15°	1620	2366	1642	1135	1620	458
25°	1456	1971	1462	911	1456	665
35°	1188	1073	1208	756	1188	743
45°	891	646	906	621	891	692
55°	612	454	616	481	612	546
65°	363	280	370	324	363	361
75°	170	138	176	164	170	182
85°	34	36	37	26	34	42
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	22.5°	25°	30°	35°	40°	45°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1732.5	1736.5	1743.1	1744.4	1757.7	1768.3	1780.2	1780.2	1784.2	1782.8	1772.3
5°	1724.6	1736.5	1753.7	1768.3	1792.1	1802.7	1818.6	1830.5	1841.1	1849.1	1847.8
7.5°	1711.3	1732.5	1757.7	1785.5	1817.3	1835.8	1858.3	1879.5	1894.1	1907.4	1916.6
10°	1688.8	1724.6	1759.0	1796.1	1837.2	1862.3	1888.8	1916.6	1939.1	1964.3	1988.2
12.5°	1658.3	1710.0	1752.4	1801.4	1851.7	1879.5	1921.9	1943.1	1986.8	2050.4	2067.6
15°	1619.9	1690.1	1729.9	1792.1	1858.3	1880.9	1939.1	1973.6	2063.7	2103.4	2151.1
17.5°	1584.2	1662.3	1715.3	1786.8	1851.7	1895.4	1952.4	2022.6	2098.1	2155.0	2208.0
20°	1555.0	1630.5	1694.1	1773.6	1855.7	1911.3	1970.9	2055.7	2137.8	2196.1	2237.2
22.5°	1488.8	1585.5	1659.7	1748.4	1847.8	1924.6	1981.5	2074.3	2163.0	2198.8	2234.5
25°	1455.7	1539.1	1625.2	1725.9	1842.5	1933.8	1982.9	2086.2	2164.3	2177.6	2185.5
27.5°	1394.8	1488.8	1589.5	1704.7	1841.1	1918.0	1980.2	2074.3	2136.5	2127.2	2103.4
30°	1319.3	1434.5	1545.8	1670.3	1822.6	1906.0	1964.3	2050.4	2082.2	2034.5	1992.1
32.5°	1263.6	1372.2	1495.4	1639.8	1801.4	1880.9	1937.8	2005.4	2012.0	1925.9	1854.4
35°	1188.1	1308.7	1447.7	1600.1	1765.6	1837.2	1890.1	1931.2	1899.4	1778.9	1694.1
37.5°	1120.6	1239.8	1388.1	1543.1	1716.6	1786.8	1829.2	1835.8	1757.7	1651.7	1527.2
40°	1046.4	1169.6	1324.6	1487.5	1662.3	1723.2	1749.7	1729.9	1617.3	1494.1	1349.7
42.5°	972.2	1094.1	1261.0	1427.9	1593.4	1645.1	1655.7	1601.4	1463.6	1319.3	1152.4
45°	891.4	1018.6	1185.5	1353.7	1514.0	1543.1	1544.4	1466.3	1303.4	1152.4	997.4
47.5°	825.2	943.1	1108.7	1276.9	1412.0	1431.8	1423.9	1333.8	1156.3	986.8	851.7
50°	752.3	864.9	1029.2	1194.7	1310.0	1315.3	1295.4	1166.9	993.4	838.4	731.2
52.5°	674.2	788.1	939.1	1098.1	1201.4	1193.4	1155.0	1017.3	854.3	725.9	643.7
55°	611.9	712.6	854.3	1009.3	1082.2	1059.6	1017.3	876.9	748.4	639.8	568.2
57.5°	543.1	631.8	770.9	906.0	948.4	927.2	884.8	753.7	634.5	552.3	504.7
60°	478.2	559.0	680.8	793.4	826.5	804.0	755.0	637.1	551.0	482.1	446.4
62.5°	418.6	488.8	590.8	694.1	707.3	684.8	642.4	547.0	472.9	418.6	392.1
65°	362.9	429.2	511.3	589.4	601.3	577.5	533.8	464.9	402.7	368.2	343.1
67.5°	308.6	361.6	434.5	491.4	498.0	475.5	439.8	384.1	345.7	308.6	290.1
70°	260.9	300.7	357.6	404.0	406.6	385.4	366.9	316.6	287.4	260.9	246.4
72.5°	214.6	242.4	286.1	320.5	321.9	308.6	291.4	259.6	234.4	215.9	201.3
75°	169.5	193.4	219.9	250.3	249.0	238.4	225.2	205.3	184.1	172.2	165.6
77.5°	129.8	144.4	165.6	185.4	185.4	180.1	172.2	157.6	144.4	132.5	125.8
80°	92.7	102.0	119.2	125.8	128.5	127.2	120.5	109.9	104.6	95.4	92.7
82.5°	59.6	66.2	74.2	80.8	84.8	82.1	80.8	75.5	67.6	64.9	62.3
85°	34.4	37.1	41.1	45.0	46.4	45.0	47.7	43.7	39.7	39.7	38.4
87.5°	14.6	15.9	18.5	18.5	19.9	19.9	18.5	19.9	19.9	18.5	17.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1790.8	1792.1	1794.8	1808.0	1814.6	1816.0	1810.7	1822.6	1826.6	1822.6	1819.9
5°	1875.6	1883.5	1899.4	1916.6	1915.3	1916.6	1924.6	1932.5	1935.2	1924.6	1928.5
7.5°	1949.7	1965.6	1982.9	2009.3	2009.3	2022.6	2027.9	2034.5	2050.4	2042.5	2039.8
10°	2034.5	2055.7	2087.5	2129.9	2131.2	2144.5	2157.7	2178.9	2185.5	2180.2	2182.9
12.5°	2140.5	2181.5	2184.2	2230.5	2251.7	2254.4	2275.6	2271.6	2284.9	2284.9	2307.4
15°	2186.8	2250.4	2286.2	2331.2	2344.5	2328.6	2345.8	2364.3	2365.7	2365.7	2364.3
17.5°	2270.3	2295.5	2331.2	2355.1	2360.4	2360.4	2361.7	2369.6	2364.3	2353.7	2361.7
20°	2287.5	2298.1	2311.3	2308.7	2311.3	2298.1	2284.9	2271.6	2272.9	2266.3	2286.2
22.5°	2255.7	2253.1	2222.6	2202.7	2202.7	2176.2	2151.1	2139.2	2127.2	2131.2	2137.8
25°	2176.2	2135.2	2098.1	2069.0	2062.3	2019.9	1985.5	1974.9	1955.0	1970.9	1973.6
27.5°	2049.1	2002.7	1943.1	1918.0	1883.5	1866.3	1842.5	1810.7	1769.6	1793.4	1789.5
30°	1912.7	1843.8	1794.8	1733.8	1679.5	1675.6	1630.5	1577.5	1556.3	1556.3	1568.3
32.5°	1760.3	1668.9	1597.4	1511.3	1458.3	1435.8	1381.5	1328.5	1340.4	1300.7	1315.3
35°	1582.8	1462.3	1372.2	1288.8	1249.1	1222.6	1152.4	1123.2	1091.4	1072.9	1107.3
37.5°	1413.3	1274.2	1159.0	1067.6	1053.0	1005.3	957.7	939.1	920.6	928.5	927.2
40°	1206.7	1083.5	980.2	908.6	883.5	861.0	829.2	806.7	794.7	801.4	802.7
42.5°	1019.9	916.6	839.8	789.4	768.2	752.3	736.5	717.9	713.9	713.9	719.2
45°	875.5	790.8	739.1	698.0	686.1	674.2	662.3	654.3	651.7	646.4	650.4
47.5°	760.3	692.7	661.0	630.5	617.2	614.6	604.0	600.0	594.7	593.4	594.7
50°	663.6	621.2	592.1	574.9	565.6	561.6	556.3	548.4	545.7	552.3	549.7
52.5°	596.0	556.3	540.4	523.2	517.9	512.6	504.7	506.0	504.7	502.0	502.0
55°	528.5	503.3	487.4	474.2	472.9	467.6	460.9	458.3	457.0	454.3	458.3
57.5°	474.2	454.3	439.8	427.8	422.5	422.5	415.9	410.6	410.6	409.3	410.6
60°	419.9	400.0	390.7	378.8	374.8	373.5	369.6	366.9	362.9	362.9	362.9
62.5°	369.6	353.7	343.1	332.5	333.8	327.2	321.9	319.2	319.2	320.5	320.5
65°	321.9	311.3	298.0	288.8	286.1	284.8	282.1	280.8	276.8	279.5	279.5
67.5°	278.2	263.6	255.6	251.7	247.7	246.4	243.7	241.1	239.7	238.4	241.1
70°	234.4	222.5	215.9	213.3	209.3	208.0	206.6	202.7	204.0	205.3	206.6
72.5°	194.7	184.1	182.8	174.8	174.8	174.8	169.5	172.2	170.9	168.2	170.9
75°	153.6	148.3	145.7	141.7	143.1	141.7	140.4	136.4	136.4	137.8	139.1
77.5°	121.9	116.6	115.2	111.3	108.6	111.3	108.6	107.3	107.3	108.6	108.6
80°	90.1	87.4	83.4	83.4	83.4	82.1	82.1	82.1	80.8	79.5	80.8
82.5°	59.6	59.6	58.3	57.0	58.3	55.6	57.0	57.0	57.0	57.0	57.0
85°	38.4	37.1	37.1	35.8	35.8	35.8	37.1	34.4	34.4	35.8	35.8
87.5°	17.2	17.2	17.2	18.5	17.2	17.2	17.2	18.5	17.2	17.2	17.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	100°	105°	110°	112.5°	115°	120°	125°	130°	135°	140°	145°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1826.6	1817.3	1809.3	1810.7	1817.3	1812.0	1798.7	1781.5	1774.9	1767.0	1774.9
5°	1936.5	1928.5	1912.7	1914.0	1910.0	1904.7	1883.5	1857.0	1857.0	1835.8	1833.2
7.5°	2045.1	2033.2	2022.6	2019.9	2005.4	1994.8	1976.2	1939.1	1924.6	1899.4	1884.8
10°	2167.0	2157.7	2145.8	2131.2	2123.3	2104.7	2074.3	2019.9	1993.5	1959.0	1933.8
12.5°	2290.2	2288.8	2262.3	2233.2	2231.9	2202.7	2181.5	2108.7	2072.9	2026.6	1967.0
15°	2368.3	2361.7	2347.1	2332.5	2336.5	2304.7	2257.0	2170.9	2147.1	2091.5	2027.9
17.5°	2367.0	2367.0	2363.0	2360.4	2356.4	2347.1	2320.6	2263.7	2225.2	2155.0	2095.4
20°	2291.5	2308.7	2312.7	2311.3	2324.6	2331.2	2329.9	2294.1	2263.7	2201.4	2140.5
22.5°	2140.5	2180.2	2197.4	2208.0	2235.8	2250.4	2284.9	2271.6	2263.7	2217.3	2165.6
25°	2000.1	2013.3	2065.0	2067.6	2106.0	2141.8	2176.2	2198.8	2227.9	2210.7	2167.0
27.5°	1818.6	1849.1	1886.2	1914.0	1921.9	1994.8	2051.7	2094.1	2160.3	2165.6	2151.1
30°	1613.3	1627.9	1688.8	1725.9	1768.3	1821.3	1903.4	1976.2	2035.8	2090.1	2108.7
32.5°	1363.0	1422.6	1458.3	1503.4	1540.5	1634.5	1735.2	1829.2	1898.1	1989.5	2029.2
35°	1133.8	1180.2	1241.1	1259.6	1327.2	1406.7	1537.8	1658.3	1763.0	1855.7	1936.5
37.5°	944.4	981.5	1046.4	1075.5	1115.3	1217.3	1327.2	1476.9	1602.7	1716.6	1817.3
40°	814.6	842.4	891.4	900.7	933.8	1026.5	1115.3	1255.7	1422.6	1576.2	1686.2
42.5°	725.9	739.1	772.2	784.1	805.3	867.6	947.1	1079.5	1234.5	1393.4	1548.4
45°	662.3	671.5	691.4	702.0	728.5	756.3	821.2	927.2	1049.0	1209.3	1376.2
47.5°	605.3	617.2	625.2	631.8	646.4	676.8	719.2	797.4	913.9	1061.0	1222.6
50°	557.6	561.6	576.2	577.5	586.8	606.6	646.4	694.1	786.8	906.0	1062.3
52.5°	510.0	513.9	523.2	532.5	536.4	552.3	578.8	618.6	687.4	781.5	920.6
55°	462.3	467.6	476.8	483.5	487.4	500.7	516.6	555.0	609.3	675.5	789.4
57.5°	414.6	426.5	429.2	433.1	439.8	454.3	468.9	491.4	533.8	594.7	678.2
60°	369.6	373.5	382.8	386.8	393.4	401.3	419.9	437.1	467.6	515.3	590.8
62.5°	323.2	332.5	336.4	340.4	345.7	355.0	366.9	385.4	411.9	450.3	510.0
65°	283.5	284.8	292.7	298.0	303.3	309.9	321.9	339.1	355.0	390.7	434.5
67.5°	245.0	247.7	250.3	255.6	262.3	268.9	279.5	288.8	308.6	332.5	366.9
70°	208.0	208.0	214.6	218.6	217.2	225.2	233.1	243.7	258.3	280.8	308.6
72.5°	174.8	173.5	178.8	180.1	182.8	188.1	193.4	204.0	211.9	229.1	250.3
75°	139.1	141.7	144.4	144.4	148.3	152.3	157.6	162.9	172.2	182.8	198.7
77.5°	109.9	109.9	112.6	113.9	117.9	116.6	121.9	127.2	133.8	143.1	155.0
80°	80.8	83.4	83.4	83.4	84.8	86.1	91.4	95.4	99.3	106.0	111.3
82.5°	57.0	57.0	59.6	59.6	59.6	62.3	62.3	63.6	66.2	70.2	74.2
85°	35.8	35.8	35.8	37.1	35.8	37.1	39.7	38.4	39.7	42.4	42.4
87.5°	17.2	17.2	17.2	17.2	17.2	18.5	17.2	18.5	19.9	19.9	19.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	150°	155°	157.5°	160°	165°	170°	175°	180°	185°	190°	195°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1768.3	1761.7	1757.7	1760.3	1752.4	1732.5	1732.5	1739.1	1731.2	1723.2	1711.3
5°	1817.3	1804.0	1796.1	1794.8	1776.2	1744.4	1737.8	1731.2	1714.0	1695.4	1675.6
7.5°	1865.0	1841.1	1827.9	1818.6	1792.1	1751.1	1733.8	1719.3	1691.5	1663.6	1638.5
10°	1904.7	1870.3	1854.4	1839.8	1805.4	1753.7	1725.9	1699.4	1663.6	1627.9	1596.1
12.5°	1936.5	1896.8	1876.9	1855.7	1813.3	1745.8	1711.3	1668.9	1633.2	1585.5	1553.7
15°	1989.5	1907.4	1888.8	1868.9	1825.2	1732.5	1690.1	1642.4	1593.4	1529.9	1495.4
17.5°	2031.9	1921.9	1920.6	1878.2	1821.3	1727.2	1662.3	1600.1	1547.1	1483.5	1429.2
20°	2057.0	1944.4	1923.3	1879.5	1808.0	1691.5	1623.9	1555.0	1498.1	1421.2	1366.9
22.5°	2078.2	1976.2	1920.6	1867.6	1780.2	1679.5	1580.2	1515.3	1437.1	1353.7	1302.0
25°	2086.2	1982.9	1924.6	1863.6	1760.3	1645.1	1532.5	1462.3	1374.9	1299.4	1229.2
27.5°	2087.5	1981.5	1910.0	1846.4	1732.5	1600.1	1484.8	1410.6	1314.0	1226.5	1156.3
30°	2074.3	1967.0	1902.1	1833.2	1706.0	1559.0	1426.5	1344.4	1241.1	1153.7	1080.8
32.5°	2034.5	1937.8	1884.8	1809.3	1671.6	1502.0	1370.9	1279.5	1170.9	1084.8	1014.6
35°	1968.3	1902.1	1843.8	1773.6	1626.6	1449.1	1315.3	1208.0	1098.1	1015.9	949.7
37.5°	1886.2	1850.4	1796.1	1727.2	1574.9	1401.4	1253.0	1133.8	1023.9	944.4	879.5
40°	1774.9	1784.2	1731.2	1668.9	1514.0	1336.5	1172.2	1058.3	955.0	880.8	817.2
42.5°	1654.4	1692.8	1662.3	1602.7	1446.4	1264.9	1112.6	986.8	886.1	809.3	756.3
45°	1524.6	1590.8	1572.2	1528.5	1376.2	1189.4	1027.9	906.0	817.2	743.1	696.7
47.5°	1382.8	1476.9	1476.9	1445.1	1298.1	1113.9	955.0	830.5	743.1	690.1	645.1
50°	1238.5	1344.4	1361.6	1340.4	1210.6	1027.9	866.3	753.7	678.2	626.5	593.4
52.5°	1087.5	1210.6	1242.4	1231.8	1117.9	945.7	793.4	683.5	614.6	569.6	540.4
55°	943.1	1086.1	1120.6	1124.5	1018.6	855.7	712.6	615.9	549.7	519.2	494.1
57.5°	806.7	944.4	982.8	989.4	917.9	773.5	637.1	552.3	492.7	467.6	447.7
60°	690.1	805.3	855.7	870.2	808.0	678.2	566.9	484.8	439.8	415.9	397.4
62.5°	594.7	687.4	740.4	744.4	716.6	594.7	494.1	425.2	386.8	365.6	356.3
65°	502.0	585.5	617.2	633.1	610.6	515.3	426.5	369.6	339.1	320.5	311.3
67.5°	427.8	480.8	507.3	528.5	506.0	434.5	362.9	316.6	294.1	275.5	270.2
70°	351.0	394.7	414.6	435.8	415.9	361.6	309.9	267.6	247.7	233.1	226.5
72.5°	280.8	315.2	333.8	347.0	335.1	290.1	247.7	218.6	204.0	193.4	189.4
75°	222.5	246.4	257.0	266.2	260.9	226.5	200.0	176.2	162.9	153.6	151.0
77.5°	169.5	186.8	198.7	201.3	194.7	172.2	149.7	135.1	124.5	119.2	116.6
80°	120.5	131.1	137.8	141.7	135.1	125.8	109.9	99.3	90.1	83.4	82.1
82.5°	80.8	86.1	91.4	90.1	87.4	79.5	70.2	64.9	60.9	55.6	55.6
85°	46.4	47.7	50.3	51.7	50.3	45.0	39.7	37.1	34.4	30.5	30.5
87.5°	19.9	21.2	21.2	22.5	19.9	19.9	17.2	14.6	14.6	13.2	11.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	200°	202.5°	205°	210°	215°	220°	225°	230°	235°	240°	245°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1704.7	1711.3	1710.0	1696.8	1682.2	1670.3	1647.7	1650.4	1642.4	1643.8	1651.7
5°	1662.3	1662.3	1657.0	1638.5	1614.6	1601.4	1576.2	1569.6	1553.7	1552.4	1551.1
7.5°	1617.3	1610.7	1604.0	1577.5	1548.4	1527.2	1492.8	1484.8	1468.9	1458.3	1453.0
10°	1564.3	1555.0	1541.8	1511.3	1475.6	1449.1	1413.3	1402.7	1372.2	1359.0	1351.0
12.5°	1506.0	1500.7	1479.5	1454.4	1396.1	1366.9	1315.3	1325.9	1295.4	1268.9	1264.9
15°	1447.7	1427.9	1415.9	1374.9	1304.7	1291.4	1250.4	1229.2	1201.4	1180.2	1180.2
17.5°	1390.8	1360.3	1333.8	1290.1	1238.5	1201.4	1170.9	1160.3	1125.9	1104.7	1100.7
20°	1315.3	1280.8	1274.2	1212.0	1176.2	1135.1	1106.0	1079.5	1054.3	1045.1	1038.4
22.5°	1243.8	1204.0	1193.4	1140.4	1104.7	1063.6	1034.5	1015.9	997.4	990.8	978.8
25°	1166.9	1143.1	1127.2	1070.2	1030.5	992.1	972.2	959.0	941.8	940.4	932.5
27.5°	1092.8	1070.2	1054.3	1000.0	970.9	935.1	919.2	904.7	895.4	891.4	887.5
30°	1029.2	1004.0	985.5	945.7	910.0	880.8	867.6	858.3	853.0	846.4	845.1
32.5°	959.0	944.4	919.2	888.8	861.0	833.1	825.2	818.6	810.6	808.0	806.7
35°	899.4	879.5	863.6	829.2	817.2	793.4	784.1	778.8	768.2	765.6	762.9
37.5°	841.1	822.5	805.3	784.1	761.6	748.4	743.1	735.1	729.8	731.2	728.5
40°	782.8	768.2	755.0	732.5	719.2	712.6	702.0	694.1	691.4	692.7	691.4
42.5°	725.9	712.6	704.7	687.4	674.2	667.6	661.0	653.0	657.0	657.0	661.0
45°	674.2	662.3	657.0	643.7	635.8	625.2	618.6	617.2	622.5	621.2	621.2
47.5°	621.2	617.2	610.6	598.7	588.1	581.5	580.2	580.2	585.5	588.1	586.8
50°	580.2	572.2	564.3	555.0	547.0	544.4	540.4	543.1	548.4	548.4	551.0
52.5°	528.5	523.2	520.5	512.6	507.3	507.3	507.3	508.6	512.6	516.6	515.3
55°	483.5	479.5	476.8	472.9	466.2	467.6	466.2	468.9	472.9	476.8	479.5
57.5°	435.8	434.5	431.8	425.2	425.2	423.9	427.8	429.2	435.8	438.4	442.4
60°	393.4	389.4	389.4	384.1	384.1	384.1	388.1	392.1	397.4	398.7	401.3
62.5°	348.4	348.4	347.0	343.1	343.1	347.0	348.4	353.7	356.3	356.3	360.3
65°	306.0	304.6	303.3	304.6	306.0	306.0	309.9	312.6	315.2	316.6	317.9
67.5°	263.6	262.3	264.9	263.6	266.2	271.5	270.2	274.2	278.2	278.2	279.5
70°	223.8	226.5	225.2	227.8	226.5	229.1	233.1	234.4	234.4	235.8	239.7
72.5°	186.8	186.8	186.8	185.4	186.8	189.4	192.1	193.4	196.0	197.4	201.3
75°	151.0	151.0	148.3	151.0	151.0	153.6	156.3	156.3	156.3	158.9	162.9
77.5°	113.9	115.2	113.9	116.6	116.6	117.9	120.5	119.2	121.9	123.2	124.5
80°	83.4	82.1	82.1	82.1	83.4	83.4	86.1	87.4	87.4	91.4	88.7
82.5°	53.0	54.3	53.0	54.3	54.3	55.6	54.3	55.6	57.0	59.6	58.3
85°	30.5	29.1	29.1	30.5	29.1	29.1	30.5	29.1	30.5	29.1	30.5
87.5°	11.9	10.6	10.6	10.6	10.6	9.3	9.3	7.9	7.9	7.9	6.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	247.5°	250°	255°	260°	265°	270°	275°	280°	285°	290°	292.5°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1642.4	1646.4	1637.1	1634.5	1637.1	1627.9	1630.5	1633.2	1633.2	1637.1	1639.8
5°	1547.1	1541.8	1532.5	1529.9	1527.2	1531.2	1528.5	1532.5	1533.8	1543.1	1544.4
7.5°	1453.0	1445.1	1437.1	1429.2	1426.5	1419.9	1426.5	1426.5	1435.8	1433.2	1439.8
10°	1341.8	1340.4	1329.9	1325.9	1320.6	1310.0	1324.6	1320.6	1327.2	1339.1	1341.8
12.5°	1259.6	1245.1	1251.7	1233.2	1239.8	1229.2	1230.5	1230.5	1241.1	1242.4	1239.8
15°	1181.5	1169.6	1152.4	1144.4	1140.4	1135.1	1152.4	1153.7	1145.7	1164.3	1157.7
17.5°	1102.0	1102.0	1086.1	1082.2	1071.6	1076.9	1074.2	1075.5	1072.9	1086.1	1092.8
20°	1033.2	1026.5	1021.2	1022.6	1009.3	1006.7	1004.0	1006.7	1015.9	1025.2	1027.9
22.5°	977.5	973.5	960.3	963.0	952.4	956.3	953.7	960.3	961.6	961.6	970.9
25°	924.5	919.2	920.6	915.3	911.3	911.3	907.3	911.3	916.6	919.2	920.6
27.5°	884.8	880.8	874.2	870.2	872.9	866.3	871.6	875.5	875.5	872.9	875.5
30°	837.1	839.8	839.8	826.5	831.8	829.2	833.1	835.8	835.8	837.1	834.5
32.5°	805.3	797.4	796.1	794.7	794.7	789.4	789.4	793.4	794.7	796.1	800.0
35°	762.9	762.9	756.3	760.3	755.0	756.3	755.0	756.3	759.0	755.0	759.0
37.5°	724.5	725.9	723.2	725.9	727.2	724.5	721.9	727.2	724.5	724.5	721.9
40°	691.4	690.1	691.4	691.4	691.4	692.7	690.1	690.1	690.1	687.4	684.8
42.5°	663.6	655.7	658.3	659.6	655.7	655.7	657.0	655.7	659.6	651.7	651.7
45°	623.9	621.2	622.5	622.5	625.2	621.2	623.9	625.2	621.2	619.9	617.2
47.5°	588.1	590.8	588.1	590.8	590.8	593.4	588.1	589.4	590.8	585.5	581.5
50°	552.3	552.3	556.3	555.0	556.3	553.7	553.7	552.3	553.7	551.0	547.0
52.5°	519.2	515.3	521.9	520.5	519.2	517.9	516.6	517.9	515.3	512.6	512.6
55°	478.2	478.2	482.1	483.5	483.5	480.8	478.2	479.5	478.2	476.8	475.5
57.5°	445.0	439.8	442.4	443.7	443.7	439.8	442.4	439.8	439.8	441.1	437.1
60°	402.7	402.7	400.0	404.0	404.0	401.3	401.3	402.7	400.0	398.7	397.4
62.5°	357.6	359.0	362.9	364.3	365.6	362.9	360.3	361.6	361.6	357.6	359.0
65°	319.2	321.9	327.2	325.8	323.2	324.5	321.9	323.2	319.2	320.5	316.6
67.5°	282.1	280.8	282.1	282.1	284.8	283.5	280.8	280.8	279.5	283.5	279.5
70°	242.4	242.4	242.4	242.4	243.7	245.0	242.4	239.7	241.1	238.4	237.1
72.5°	201.3	202.7	201.3	204.0	200.0	202.7	202.7	201.3	200.0	200.0	200.0
75°	162.9	165.6	161.6	162.9	161.6	164.2	162.9	162.9	160.3	158.9	160.3
77.5°	124.5	125.8	123.2	124.5	123.2	124.5	124.5	123.2	123.2	123.2	123.2
80°	88.7	90.1	88.7	87.4	86.1	88.7	86.1	87.4	88.7	87.4	90.1
82.5°	57.0	57.0	55.6	57.0	54.3	54.3	55.6	55.6	54.3	57.0	54.3
85°	27.8	27.8	30.5	27.8	26.5	26.5	26.5	27.8	26.5	29.1	27.8
87.5°	6.6	5.3	6.6	6.6	5.3	5.3	6.6	5.3	6.6	7.9	5.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	295°	300°	305°	310°	315°	320°	325°	330°	335°	337.5°	340°
0°	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2	1723.2
2.5°	1635.8	1646.4	1642.4	1627.9	1645.1	1645.1	1657.0	1657.0	1671.6	1676.9	1684.8
5°	1543.1	1551.1	1557.7	1551.1	1563.0	1581.5	1592.1	1601.4	1621.3	1629.2	1641.1
7.5°	1443.8	1458.3	1465.0	1465.0	1484.8	1506.0	1527.2	1540.5	1568.3	1578.9	1590.8
10°	1347.1	1364.3	1377.5	1376.2	1409.3	1422.6	1449.1	1479.5	1507.3	1523.2	1540.5
12.5°	1245.1	1254.4	1272.9	1299.4	1307.3	1331.2	1361.6	1400.1	1450.4	1465.0	1490.1
15°	1160.3	1185.5	1200.0	1212.0	1230.5	1253.0	1286.1	1323.2	1373.6	1405.4	1431.8
17.5°	1088.8	1121.9	1131.2	1128.5	1152.4	1186.8	1225.2	1253.0	1298.1	1336.5	1361.6
20°	1030.5	1043.7	1059.6	1066.3	1084.8	1121.9	1159.0	1190.8	1227.9	1258.3	1287.5
22.5°	972.2	982.8	996.1	1008.0	1022.6	1043.7	1079.5	1119.2	1155.0	1184.2	1217.3
25°	924.5	931.2	943.1	952.4	968.2	982.8	1008.0	1051.7	1094.1	1111.3	1140.4
27.5°	878.2	883.5	891.4	902.0	910.0	924.5	947.1	982.8	1026.5	1043.7	1083.5
30°	837.1	841.1	849.0	854.3	858.3	875.5	892.7	920.6	953.7	977.5	1006.7
32.5°	798.7	802.7	810.6	812.0	817.2	826.5	842.4	867.6	896.7	916.6	941.8
35°	756.3	759.0	766.9	769.6	773.5	781.5	793.4	812.0	838.4	853.0	875.5
37.5°	723.2	721.9	727.2	731.2	736.5	740.4	744.4	762.9	782.8	796.1	813.3
40°	687.4	684.8	686.1	691.4	694.1	699.4	699.4	717.9	731.2	741.7	755.0
42.5°	651.7	650.4	647.7	650.4	653.0	654.3	655.7	668.9	682.1	691.4	706.0
45°	615.9	614.6	611.9	613.3	613.3	615.9	619.9	625.2	634.5	642.4	650.4
47.5°	582.8	580.2	576.2	574.9	577.5	577.5	577.5	582.8	592.1	594.7	602.7
50°	548.4	544.4	539.1	536.4	536.4	535.1	537.8	539.1	547.0	549.7	556.3
52.5°	511.3	508.6	503.3	498.0	499.4	496.7	498.0	499.4	502.0	506.0	510.0
55°	474.2	468.9	464.9	463.6	459.6	459.6	455.6	460.9	459.6	460.9	466.2
57.5°	438.4	433.1	426.5	423.9	419.9	418.6	415.9	414.6	415.9	419.9	423.9
60°	396.0	393.4	389.4	385.4	382.8	378.8	376.2	376.2	374.8	374.8	376.2
62.5°	355.0	353.7	348.4	347.0	344.4	341.7	337.8	335.1	335.1	337.8	339.1
65°	315.2	313.9	309.9	308.6	302.0	299.3	298.0	296.7	294.1	294.1	294.1
67.5°	278.2	274.2	274.2	267.6	262.3	259.6	257.0	255.6	255.6	255.6	257.0
70°	237.1	237.1	233.1	229.1	223.8	225.2	221.2	217.2	217.2	214.6	215.9
72.5°	197.4	196.0	192.1	190.7	186.8	182.8	180.1	182.8	178.8	177.5	178.8
75°	158.9	157.6	155.0	152.3	153.6	149.7	145.7	144.4	144.4	141.7	141.7
77.5°	121.9	124.5	119.2	117.9	115.2	112.6	111.3	109.9	109.9	109.9	112.6
80°	84.8	86.1	86.1	83.4	84.8	80.8	80.8	80.8	76.8	78.1	79.5
82.5°	54.3	54.3	53.0	54.3	53.0	53.0	51.7	51.7	50.3	50.3	51.7
85°	30.5	29.1	27.8	30.5	29.1	29.1	27.8	27.8	27.8	27.8	27.8
87.5°	6.6	7.9	7.9	7.9	7.9	9.3	9.3	9.3	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	345°	350°	355°	360°
0°	1723.2	1723.2	1723.2	1723.2
2.5°	1691.5	1691.5	1711.3	1732.5
5°	1654.4	1663.6	1695.4	1724.6
7.5°	1618.6	1634.5	1674.2	1711.3
10°	1574.9	1596.1	1645.1	1688.8
12.5°	1532.5	1552.4	1609.3	1658.3
15°	1472.9	1498.1	1559.0	1619.9
17.5°	1413.3	1438.5	1512.6	1584.2
20°	1343.1	1376.2	1459.7	1555.0
22.5°	1278.2	1319.3	1412.0	1488.8
25°	1206.7	1270.2	1356.3	1455.7
27.5°	1143.1	1206.7	1294.1	1394.8
30°	1071.6	1136.5	1226.5	1319.3
32.5°	1002.7	1062.3	1149.7	1263.6
35°	931.2	988.1	1072.9	1188.1
37.5°	866.3	921.9	1014.6	1120.6
40°	802.7	861.0	940.4	1046.4
42.5°	743.1	794.7	866.3	972.2
45°	688.8	725.9	792.1	891.4
47.5°	631.8	664.9	725.9	825.2
50°	578.8	606.6	659.6	752.3
52.5°	527.2	551.0	600.0	674.2
55°	480.8	503.3	539.1	611.9
57.5°	433.1	450.3	484.8	543.1
60°	386.8	402.7	430.5	478.2
62.5°	340.4	353.7	380.1	418.6
65°	299.3	309.9	329.8	362.9
67.5°	259.6	266.2	282.1	308.6
70°	221.2	226.5	239.7	260.9
72.5°	180.1	185.4	200.0	214.6
75°	145.7	147.0	157.6	169.5
77.5°	113.9	112.6	120.5	129.8
80°	78.1	82.1	88.7	92.7
82.5°	53.0	54.3	57.0	59.6
85°	29.1	30.5	30.5	34.4
87.5°	11.9	13.2	13.2	14.6
90°	0.0	0.0	0.0	0.0

TEST NUMBER: P997659

CATALOG NUMBER: SA2XXDP-B865DB2750-4F0-XX-W2A-A_3500K

CIE UGR TABLE:

Reflectances:											
Ceiling		0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
Wall		0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
Reference plane		0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions		Viewed crosswise					Viewed endwise				
X=2H	Y=2H	23.46	24.97	23.82	25.29	25.60	19.73	21.24	20.09	21.55	21.87
	3H	24.57	25.93	24.95	26.26	26.62	21.14	22.50	21.52	22.83	23.19
	4H	24.90	26.17	25.30	26.52	26.90	21.65	22.92	22.04	23.27	23.65
	6H	25.09	26.27	25.50	26.63	27.02	22.00	23.18	22.41	23.55	23.94
	8H	25.13	26.25	25.55	26.64	27.04	22.12	23.24	22.54	23.63	24.03
	12H	25.14	26.22	25.57	26.60	27.03	22.19	23.26	22.62	23.65	24.08
4H	2H	23.58	24.85	23.98	25.20	25.58	20.52	21.80	20.92	22.15	22.53
	3H	24.91	25.97	25.32	26.37	26.77	22.10	23.16	22.51	23.56	23.96
	4H	25.38	26.34	25.81	26.75	27.19	22.70	23.65	23.13	24.07	24.51
	6H	25.71	26.54	26.17	26.98	27.44	23.15	23.98	23.61	24.42	24.88
	8H	25.79	26.56	26.25	27.01	27.47	23.30	24.07	23.76	24.51	24.98
	12H	25.83	26.52	26.31	27.00	27.47	23.40	24.09	23.88	24.57	25.04
8H	4H	25.47	26.24	25.93	26.69	27.15	23.11	23.88	23.57	24.33	24.79
	6H	25.87	26.51	26.37	27.00	27.48	23.65	24.29	24.15	24.78	25.26
	8H	26.00	26.58	26.52	27.08	27.57	23.85	24.42	24.36	24.93	25.42
	12H	26.09	26.60	26.60	27.09	27.65	24.01	24.52	24.52	25.01	25.58
12H	4H	25.46	26.15	25.94	26.63	27.10	23.16	23.85	23.64	24.33	24.80
	6H	25.87	26.44	26.38	26.95	27.44	23.72	24.30	24.24	24.81	25.30
	8H	26.03	26.54	26.54	27.03	27.60	23.97	24.48	24.48	24.97	25.54